REMARKS

Status of the Application

Claims 1-14 are all the claims that have been examined in the application. Claims 1-3, 5-8, and 10-12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kadrmas (U.S. Patent No. 3,781,552). Claims 1-2, 6-7, and 11-14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Gould et al. (U.S. Patent No. 4,777,660). Claims 4 and 9 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Kadrmas in view of Weiss (U.S. Patent No. 3,371,212).

By this Amendment, Applicants are amending claims 1 and 5 and are adding new claims 15-20.

Claim Objections

Claims 5 and 13 are objected to because of the following informalities: Claim 5 recites the limitation "the secondary optical surface" in line 5. There is insufficient antecedent basis for this limitation in the claim. Claim 13 recited the limitation "said optical face" in line 2.

Applicants have corrected the deficiencies noted by the Examiner. Withdrawal of the objections are hereby respectfully requested.

Claim Rejections under 35 U.S.C. § 102

A. Claims 1-3, 5-8, 10-12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kadrmas (U.S. Patent No. 3,781,552).

Claim 1 recites, in part, "the transmitting beam axis incident to the primary optical surface does not coincide with the receiving beam axis incident to the primary optical surface at

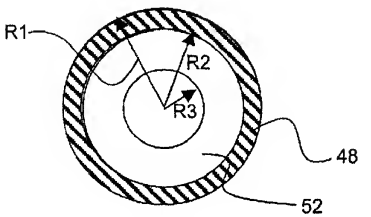
any point along the path of the transmitting beam; and wherein the axis of the transmitting beam is located at the center of the transmitting beam, and the axis of the receiving beam is located at the center of the receiving beam." The Examiner argues that Kadrmas discloses that the transmitting beam axis incident to the primary optical surface does not coincide with the receiving beam axis incident to the primary optical surface.

Applicants respectfully submit that Kadrmas discloses that the axes for the transmitting beam and the receiving beam are coincident in many places along the path of the transmitting beam when the axes are taken at the center of the transmitting beam and the center of the receiving beam, respectively. Miriam-Webster defines coincide to mean "to occupy the same place in space or time." Specifically, as the transmitting beam passes from the laser 52 through the main telescope optics 40, the axes of the transmitting beam and the receiving beam (extending from the receiver relay optics) cross, or coincide, in at least one point. See FIG. 1 of Kadrmas. Therefore, claim 1, as amended, is patentable over the applied art.

Further, claim 1 recites, in part, "wherein the reflecting optical surface is larger than the at least one illuminated area." The Examiner alleges that Kadrmas teaches or suggests this limitation of claim 1, citing elements 46 and 48 as the at least one illuminated area, and elements 48 and 52 as the reflecting optical surface. Applicants respectfully disagree.

Kadrmas teaches or suggests that elements 48 and 52 are donut shaped, with element 52, the receiving area, arranged inside of element 48, the transmitting area as defined by Kadrmas. By setting R1 to represent the radius of exterior diameter of element 48, R2 to represent the radius of the outer diameter of element 52, and R3 to represent the radius of the hole, from

simple geometric formulae it becomes clear that if the difference between R2 and R3 is less than or equal to the difference between R1 and R2, the illuminated area 48 is always larger than the receiving area 52.



In order for the receiving area 52 to be larger in area than the illumination area 48, the difference between R2 and R3 must be well greater than the difference between R3 and R2. As such, Kadrmas fails to discuss the relationship between the various radii R1, R2, and R3. Applicants thus respectfully submit that Kadrmas fails to teach or suggest that the reflecting optical surface is larger than the at least one illuminated area, as there is no teaching or suggestion in Kadrmas which would disclose this element of claim 1. Therefore, claim 1 is patentable over the applied art.

Claims 2, 3, 5 and 11 are patentable over the applied art at least by virtue of their dependency from claim 1.

Claim 6 recites similar limitations to those found in claim 1. Therefore, for reasons analogous to those presented with regard to claim 1, claim 6 is patentable over the applied art. Claims 7, 8, 10, and 12 are patentable over the applied art at least by virtue of their dependency from claim 6.

B. Claim 1-2, 6-7, 11-14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Gould et al. (U.S. Patent No. 4,777,660).

Claim 1 recites, in part, "wherein the reflecting optical surface of the primary optical surface is larger than the at least one illuminated area." The Examiner alleges that Gould teaches all of the elements of claim 1. Gould, however, completely uses a single optical surface (designed 26) for transmitting and for receiving. The *entire reflecting optical surface* of telescope mirror 26 is used in transmission and in reception.

In Gould the whole surface 26 is used both for the receiving and for the transmitting path. In other words, the area of optical surface 26 receives an outgoing beam, and collimates it towards rotatable mirror 25 which directs the outgoing beam towards a remote receiver. An incoming beam is reflected by rotatable mirror 25 which directs the beam towards optical surface 26. The optical surface 26 receives collimated incoming beam and reflects the incoming beam to the diagonal mirror 24. The diagonal mirror directs the incoming beam to the detector 28. Because Gould fails to teach or suggest that the reflecting optical surface of the primary optical surface is larger than the at least one illuminated area, claim 1 is patentable over the applied art.

Claims 2, 11 and 13 are patentable at least by virtue of their dependency from claim 1.

Claim 6 recites a similar limitation to claim 1. Therefore, for reasons analogous to those presented with respect to claim 1, claim 6 is patentable over the applied art. Claims 7, 12 and 14 are patentable at least by virtue of their dependency from claim 6.

Claim Rejections under 35 U.S.C. § 103

Claims 4 and 9 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Kadrmas in view of Weiss (U.S. Patent No. 3,371,212).

Claims 4 and 9 are dependent from claims 1 and 6, respectively. Because Kadrmas fails to teach or suggest all of the elements of claims 1 and 6, and because Weiss fails to cure the defects noted above with respect to claims 1 and 6, claims 4 and 9 are patentable at least by virtue of their dependency from claims 1 and 6, respectively.

New Claims

Applicant is adding new claims 15-20 in order to more fully describe the present invention. Claims 15-20 are patentable at least by virtue of their dependencies from amended claims 1 and 6, respectively.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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23373
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Date: December 15, 2006